

CLAIMS

Therefore, the following is claimed:

1 1. A system for attenuating leakage signals in a communication system,
2 comprising;

3 a plurality of amplifiers coupled between a plurality of communication
4 connections and a communication device, at least one of said plurality of amplifiers
5 configured to have a nearly-zero impedance characteristic such that at least one leakage
6 signal originating on a first communication connection of said plurality of
7 communication connections cannot propagate from said first communication connection
8 to a second communication connection of said plurality of communication connections.

1 2. The system of claim 1, wherein at least one of said plurality of amplifiers
2 is configured as a negative feedback amplifier.

1 3. The system of claim 1, further comprising a second plurality of amplifiers,
2 said second plurality of amplifiers coupled between a second plurality of communication
3 connections and said communication device.

1 4. The system of claim 1, wherein at least one of said plurality of
2 communications connections is a digital subscriber loop.

00748487-122700

1 5. A method for shunting leakage signals in a communication system, the
2 method comprising the steps of:

3 coupling at least one amplifier between a first communication connection and a
4 communication device, said amplifier having a nearly-zero impedance characteristic; and

5 shunting at least one leakage signal originating on said first communication
6 connection away from a second communication connection coupled to said
7 communication device.

1 6. A system for shunting leakage signals in a communication system,
2 comprising:

3 means for shunting, said means for shunting having a nearly-zero impedance
4 characteristic; and

5 means for coupling said shunting means to a first communication connection and
6 a communication device,
7 such that said shunting means prevents at least one leakage signal originating on said first
8 communication connection from propagating to a second communication connection
9 coupled to said communication device.

1 7. The system of claim 6, wherein said coupling means further couples said
2 second communication connection to said shunting means.

1 8. A system for attenuating leakage signals in a communication system,
2 comprising;
3 a communication device; and
4 a plurality of amplifiers, said plurality of amplifiers coupled between a plurality
5 of communication connections and said communication device,
6 wherein said plurality of amplifiers have a nearly-zero impedance characteristic such that
7 at least one leakage signal originating on a first communication connection coupled to
8 said communication device cannot propagate from said first communication connection
9 to a second communication connection coupled to said communication device.

1 9. The system of claim 8, wherein said communication device time
2 multiplexes said plurality of signals onto a single channel.

1 10. The system of claim 8, wherein said communication device frequency
2 multiplexes said plurality of signals onto a plurality of channels.

1 11. The system of claim 8, wherein said communication device is a signal
2 multiplexing communication device.